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NOTICE OF ALLOWANCE AND FEE(S) DUE

23373 7590 10/13/2011 SUGHRUE MION, PLL.C 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON. DC 20037 EXAMINER
BUIE-HATCHER, NICOLE M

ART UNIT PAPER NUMBER

1767

DATE MAILED: 10/13/2011

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/579,790 | 05/18/2006 | Yoshiyuki Takase | 094561 | 7397 |

TITLE OF INVENTION: PROCESS FOR PRODUCTION OF FLUORINE-CONTAINING POLYMERS AND FLUORINE-CONTAINING POLYMERS

| APPLN. TYPE | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE |
|----------------|--------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | NO | \$1740 | \$300 | \$0 | \$2040 | 01/13/2012 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. ISI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

IL PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

PREV. PAID ISSUE FEE

□ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance feed with the mailed to the current correspondence address, and indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or by indicating a separate "FEE ADDRESS" for maintenance fee notification

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address) Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying

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SMALL ENTITY

5. Change in Entity Status (from status indicated above)

a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

interest as shown by the records of the United States Patent and Trademark Office

ISSUE FEE DUE

WASHINGTON, DC 20037

APPLN. TYPE

papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Feeds (Yanaling or 1 ransamssion)
I hereby certify that this Feeds (Yanasmital is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (5/11)273-22885, on the date indicated below.

(Depositor's nam (Signate (Dat

TOTAL FEE(S) DUE

DATE DUE

APPLICATION NO FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO CONFIRMATION NO 10/579 790 05/18/2006 Yoshivuki Takase 094561 7397 TITLE OF INVENTION: PROCESS FOR PRODUCTION OF FLUORINE-CONTAINING POLYMERS AND FLUORINE-CONTAINING POLYMERS

PUBLICATION FEE DUE

nonprovisional NO \$1740 \$300 SO \$2040 01/13/2012 EXAMINER ART UNIT CLASS-SUBCLASS BUIE-HATCHER, NICOLE M 1767 264-083000 Change of correspondence address or indication of "Fee Address" (37) 2. For printing on the patent front page, list the names of up to 3 registered patent attorneys or agents OR, alternatively. ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. (2) the name of a single firm (having as a member a "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is Number is required. listed, no name will be printed. 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type) PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment. (A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY) Please check the appropriate assignee category or categories (will not be printed on the patent): 🔲 Individual 🚨 Corporation or other private group entity 🚨 Government 4a. The following fee(s) are submitted: 4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above) ☐ Issue Fee A check is enclosed. ☐ Publication Fee (No small entity discount permitted) Payment by credit card. Form PTO-2038 is attached. The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this for Advance Order - # of Copies (enclose an extra copy of this form).

Authorized Signature Date Typed or printed name Registration No. This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for rectucing this burden, should be sent to the Chief Information Officer. U.S. Patest and Trademark Officer. U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 2231-450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 2231-450. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

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UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450

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| 23373 75 | 90 10/13/2011 | EXAMINER | | |
| SUGHRUE MIO | | BUIE-HATCHER, NICOLE M | | |
| 2100 PENNSYLV. | ANIA AVENUE, N.W | | | |
| SUITE 800 | | | ART UNIT | PAPER NUMBER |
| WASHINGTON, I | OC 20037 | 1767 | | |

DATE MAILED: 10/13/2011

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 210 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 210 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

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The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

- The information on this form will be treated confidentially to the extent allowed under the Freedom
 of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of
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 records is required by the Freedom of Information Act.
- A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement neeotiations.
- 3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
- 4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
- 5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
- A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
- 7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals
- 8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
- A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Notice of Allowability

| Application No. | Applicant(s) | |
|------------------------|-----------------|--|
| application no. | / ippiiouiii(o) | |
| | | |
| 10/579.790 | TAKASE ET AL. | |
| Examiner | Art Unit | |
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| | | |
| NICOLE M. BUIE-HATCHER | 1767 | |
| | | |

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative on

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address-

| of the Office or upon petition by the applicant. See 37 CF | R 1.313 and MPEP 1308. |
|---|--|
| 1. X This communication is responsive to <u>response filed</u> | <u>09/20/2011</u> . |
| An election was made by the applicant in response t requirement and election have been incorporated in | to a restriction requirement set forth during the interview on; the restriction to this action. |
| The allowed claim(s) is/are <u>1-5</u>. | |
| Copies of the certified copies of the pri- International Bureau (PCT Rule 17.2(a Certified copies not received: Applicant has THREE MONTHS FROM THE "MAILING noted below. Failure to timely comply will result in ABA! | nts have been received. Ints have been received in Application No Ints have been received in Application No Interpret the stage application from the stage application. |
| | : e submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF nich gives reason(s) why the cath or declaration is deficient. |
| CORRECTED DRAWINGS (as "replacement sheet (a) ☐ including changes required by the Notice of Dray 1) ☐ hereto or 2) ☐ to Paper No./Mail Date | s") must be submitted. aftsperson's Patent Drawing Review (PTO-948) attached |
| Identifying indicia such as the application number (see 3 each sheet. Replacement sheet(s) should be labeled as s | 7 CFR 1.84(c)) should be written on the drawings in the front (not the back) of such in the header according to 37 CFR 1.121(d). |
| | osit of BIOLOGICAL MATERIAL must be submitted. Note the ENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. |
| Attachment(s) | E Nation of Informal Patent Application |

| 1. [2] | Notice | 01 11 | orerence | 3 01 | rea (i | 10-032) | | | |
|--------|--------|-------|-----------|-------|--------|---------|--------|---------|----|
| 2. 🔲 | Notice | of D | raftperso | n's l | Patent | Drawing | Review | (PTO-94 | 18 |
| | | | | | | | | | |

 Information Disclosure Statements (PTO/SB/08). Paper No./Mail Date

4. T Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. Notice of Informal Patent Application

6. Interview Summary (PTO-413), Paper No./Mail Date ___

7. Examiner's Amendment/Comment

8. X Examiner's Statement of Reasons for Allowance

Other _____.

/Mark Eashoo/ Supervisory Patent Examiner, Art Unit 1767 Art Unit: 1767

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance:

A) The previous rejection of claims 7-10 under 35 U.S.C. 103(a) is withdrawn in light of Applicant's cancellation of the claims.

B) The closest prior art of record, Schreyer teaches a fluoro-polymerized material. However, Shreyer does not teach or suggest melt-kneading a fluoropolymer with unstable terminal group or groups comprising alkoxycarbonyl groups and/or fluoroalkoxycarbonyl groups.

Carlson (US 3,674,758) teaches TFE copolymers having methyl ester end-groups (C1/L29-39). However, Carlson teaches the ester end-groups are quite stable under prolonged storage at extrusion temperature (C1/L29-39). Furthermore, Carlson teaches the methyl ester end-groups are equivalent to polymers containing stable end groups such as –CF₂H. Therefore, one of ordinary skill in the art at the time of invention would not convert the stable groups of Carlson to end groups such as –CF₂H. Furthermore, Carlson that high-temperature humid heat-treatment is very expensive and produces contamination which teaches away from the claimed invention (C1/L16-25).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Art Unit: 1767

Correspondence

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to NICOLE M. BUIE-HATCHER whose telephone number is

(571)270-3879. The examiner can normally be reached on Monday-Thursday with alternate

Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Mark Eashoo can be reached on (571)272-1197. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/N. M. B./ Examiner, Art Unit 1767 10/4/2011

/Mark Eashoo/

Supervisory Patent Examiner, Art Unit 1767